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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/555,956

11/07/2005

Martin Krumpelmann

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EXAMINER

CHEN, YUAN L

ART UNIT

PAPER NUMBER

4193

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/555,956	Applicant(s) KRUMPELMANN ET AL.	
	Examiner YUAN L. CHEN	Art Unit 4193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/07/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/23/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "6" has been used to designate both the signal line and the printing plate in Fig. 1 and character "7" has been used designate both the control device in Fig. 1 and the recess in Fig. 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it is not limited to a single paragraph on a separate sheet. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: "the patent application US" in page 2 lines 19 and 29 should be replaced by -- patent no. US --, "It 3 is" in page 6 line 20 should be changed to -- it is --.

Appropriate correction is required.

Claim Objections

5. Claims 1, 4, 6, 8, 10, and 11 are objected to because of the following informalities:

improper phrases "can be" in Claim 1 Line 6 should be changed to -- is --,
improper phrases "can be" in Claim 1 Line 27 should be changed to -- is --,
improper phrases "can be" in Claim 1 Line 31 should be changed to -- is --,
improper phrases "can be" in Claim 4 Line 3 should be changed to -- is --,
improper phrases "can be" in Claim 6 Line 20 should be changed to -- is --,
improper phrases "can be" in Claim 6 Line 30 should be changed to -- is --,
improper phrases "can be" in Claim 6 Line 34 should be changed to -- is --,
improper phrases "can be" in Claim 8 Line 7 should be changed to -- is --,
improper phrases "can be" in Claim 8 Line 20 should be changed to -- is --,
improper phrases "can be" in Claim 8 Line 28 should be changed to -- is --,
improper phrases "can be" in Claim 8 Line 32 should be changed to -- is --,
improper phrases "can be" in Claim 8 Line 33 should be changed to -- is --,

improper phrases “can be” in Claim 10 Line 3 should be changed to – is --,
improper phrases “can be” in Claim 11 Line 3 should be changed to – is --,
improper phrases “using which it is possible” in Claim 1 Lines 21 should be
eliminated,

improper phrases “and it is possible” in Claim 1 Lines 23 should be eliminated,
improper phrases “using which it is possible” in Claim 6 Lines 23 should be
eliminated,

improper phrases “using which it is possible” in Claim 8 Lines 22 should be
eliminated,

improper phrases “and it is possible” in Claim 1 Lines 25 should be eliminated.

The reference (6) has been used to designate as printing plate in Claim 1 (Lines 5 and 11), Claim 6 (Lines 6, 12 and 40) and Claim 8 (Lines 6 and 12), and printing mandrel in Claim 1 (Line 38) and Claim 8 (Line 39) as well as print image in Claim 1 (Line 40), Claim 6 (Line 42) and Claim 8 (Line 41).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1 – 4 and 6 – 11 are rejected under 35 U.S.C. 102(a) as being anticipated by Ikeda et al. (EP 1205300A1).

Art Unit: 4193

8. With respect to Claim 1, Ikeda et al. disclose in Figs. 3, 8 and 9 a color rotary printing machine,

- in which one printing plate support (73) each is assigned to the colors to be transferred on to the printing plate, whereby said plate support (73) supports a printing plate and
- said printing plate support (73) is attached to a mandrel or cylinder (72) of a rotary printing machine in order to transfer the printing image onto the printing substrate (93),
- whereby the rotary printing machine has register devices (4, 5) that determine the positions of the printing plates with respect to one another and
- whereby the register devices (4, 5) comprise sensors (4, 91) that determine the positions of the printing plate support in the printing machine and
- whereby the register devices (4, 5) provide information regarding the position of the printing plate support before, or at the start of or during the print process with the help of sensors (4, 91),
- based on which control signal is provided (Column 8 Lines 27 – 33),
- whereby the register device (4, 5) comprise a control device (5) to generate control signals based on the positions of the printing plate support determined by the sensors (4, 91) to control the drives (84) of the mandrels or the print cylinder (72) using said control signals in such a manner that the phase position of the mandrels or the print cylinder (72) in relation to one another is changed,

- and the register accuracy of the print increases (Column 3 Line 27),
- and whereby each printing plate support contains at least one information carrier (90) from which information is detected using the sensor (4, 91), whereby the information that is read out automatically is suitable for determining the relative position of the print cylinder of a rotary printing machine (Column 8 Line 27 – 33),

characterized in

- that the information carrier (90) is arranged outside the printing mandrel and
- that the information carrier (90) is arranged between the print image and the edge of the printing plate support that is turned toward the front end of the mandrel or of the print cylinder (73).

9. With respect to Claim 2, Ikeda et al. disclose in Fig. 9 that the information carrier (90) has an oblong, rectangular shape whereby its long side is essentially aligned in the peripheral direction of the printing plate support.

10. With respect to Claim 3, Ikeda et al. disclose in Fig. 9 that the information carrier (90) surrounds the periphery of the mandrel or the cylinder (73) of the printing machine.

11. With respect to Claims 4 and 10 - 11, Ikeda et al. disclose that the information stored on the information carrier (90) is read out optically, magnetically or electromagnetically (Fig. 9).

12. With respect to Claim 6, Ikeda et al. disclose in Figs. 3, 8 and 9 a process for setting up a color rotary printing machine before and at the print process

- in which one printing plate support (73) each is assigned to the colors to be transferred on to the printing plate, whereby said plate support (73) supports a printing plate
- and in which the printing plate supports (73) are attached to mandrel or cylinders (72) of a rotary printing machine in order to transfer the printing image onto the printing substrate (93) and
- in which the register devices (4, 5) determine the positions of the printing plates with respect to one another,
- whereby the register devices (4, 5) comprise sensors (4, 91) that determine the positions of the printing plate support in the printing machine and
- whereby the register devices (4, 5) provide information based on the positions of the printing plate supports determined by the sensors (4, 91),
- whereby control signals are derived based on this information (Column 8 Lines 27 – 33) and
- whereby the register device (4, 5) comprise a control device (5) used to generate control signals based on the positions of the printing plate support determined by the sensors (4, 91)
- and whereby the control device uses these control signals to control the drives (84) of the mandrels or the print cylinders (72) in such a manner that the phase position of the mandrels or the print cylinders (72) in relation to one another is changed,
- so as to increase the register accuracy of the print(Column 3 Line 27),

Art Unit: 4193

- and whereby printing plate supports are used that each contains at least one information carrier (90) from which information is removed using a sensor (4, 91),
- and whereby this information is read out automatically and used for determining the relative position of the print cylinder of a rotary printing machine (Column 8 Line 27 – 33),

characterized in that

- printing plates are used in which the information carrier (90) is arranged outside the printing mandrel and
- whereby the information carrier (90) is arranged between the print image and the edge of the printing plate support that is turned toward the front end of the mandrel or of the print cylinder (73).

13. With respect to Claim 7 Ikeda et al. disclose in Figs. 3, 8 and 9 a process characterized in that during the adjustment of the relative phase position of the mandrels or the print cylinders (72), the printing plate supports (73) rest in relation to the mandrels or print cylinders (72) assigned to them.

14. With respect to Claim 8, Ikeda et al. disclose in Figs. 3, 8 and 9 a process characterized in that a color rotary printing machine is used in which one printing plate support (73) each is assigned to the colors to be transferred onto the printing plate, whereby said plate support (73) supports a printing plate and

Art Unit: 4193

- said printing plate support (73) is attached to a mandrel or cylinder (72) of a rotary printing machine in order to transfer the printing image onto the printing substrate (93),
- whereby the rotary printing machine has register devices (4, 5) that determine the positions of the printing plates with respect to one another and
- whereby the register device (4, 5) provide information regarding the positions of the printing plate support before, at the start of or during the printing process with help of sensors (4, 91),
- based on which control signals are provided,
- whereby the register devices (4, 5) comprise a control device (5) used to generate control signals based on the positions of the printing plate support determined by the sensors (4, 91) and to use these control signals to control the drives (84) of the mandrels or the print cylinders (72) using said control signals in such a manner that the phase position of the mandrels or the print cylinders (72) in relation to one another is changed,
- and the register accuracy of the print increases (Column 3 Line 27),
- and whereby each printing plate support contains at least one information carrier (90) from which information is removed using a sensor (4, 91), whereby the information is read out automatically and used for determining the relative position of the printing plate support on the mandrel or on the print cylinder (72) of a rotary printing machine (Column 8 Line 27 – 33),

characterized in

- that the information carrier (90) is arranged outside the printing mandrel and that the information carrier (90) is arranged between the print image and the edge of the printing plate support that is turned toward the front end of the mandrel or of the print cylinder (73).

Claim 9 is the same as Claim 3, which is taught by Ikeda et al. in Fig. 9 as discussed above.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 5 and 12 - 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. further in view of Yang (US patent No. 5674169).

For Claims 5 and 12 – 14, Ikeda et al. teaches the limitation of Claims 1 – 4 for the reasons above. Ikeda et al. does not disclose that the information carrier comprises a magnetic tape or a sequence of magnetizable individual elements.

Yang discloses in Figs. 173 and 180 as well as columns 67 and 68 a positioning control setting system, where the information carrier comprises a magnetic tape or a sequence of magnetizable individual elements (173-1 and 180-1) and the information stored on the information carrier (173-1 and 180-1) is read out magnetically or electromagnetically (column 68 line 8 – 10).

Therefore it would be obvious to a person of ordinary skill in the art at the time of invention to modify Ikeda et al.'s color rotary printing machine by using Yang's system. In this modification/combination, the information stored on the information carrier comprises a magnetic tape or a sequence of magnetizable individual elements for the purpose of effectively preventing the information carriers from getting smudged and improving the accuracy and the quality of the register process. The modification/combination meets all the limitation of Claims 5 and 12 - 14.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference Wech (Us patent No. 6314883 B1) discloses an apparatus and method for compensating displacement of a printing plate sleeve. The reference Hicker et al. (DE 19832892 A1) disclose a pre-positioning, registration and corrective-adjustment system for cylinders printing using optical, mechanical or electromagnetic detectable tags. The reference Schadlich et al. (US patent No. 5551339) disclose the process and device for register-correct posting of printing form sleeve. The reference Siler et al. (EP 0835753 A1) discloses a pre-registration system for a web-printing machine.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuan L. Chen whose telephone number is 571-270-3799. The examiner can normally be reached on Monday-Friday 7:30 AM to 5:00 PM EST.

Art Unit: 4193

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Nguyen can be reached on 571-272-1753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

yc

/Long Nguyen/
Supervisory Patent Examiner
Art Unit 4193